

WHAT IS CLAIMED IS:

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1. A method for communicating a clock signal over an optical link, comprising:

receiving a multimodulated optical information  
5 signal comprising non-intensity modulation for a data  
signal and intensity modulation for a clock signal;

recovering the clock signal based on the  
intensity modulation of the multimodulated optical  
information signal;

10 converting the non-intensity modulation for the  
data signal to intensity modulation for the data signal;  
and

recovering the data signal from the intensity  
modulation for the data signal using the clock signal.

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2. The method of Claim 1, wherein the non-  
intensity modulation comprises a phase modulation of a  
carrier signal.

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3. The method of Claim 1, wherein the non-  
intensity modulation comprises a frequency modulation of  
a carrier signal.

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4. The method of Claim 1, wherein the data signal  
is phase shift keyed in the multimodulated optical  
information signal and the clock signal is intensity  
shift keyed in the multimodulated optical information  
signal.

5. A system for communicating a clock signal over an optical link, comprising:

means for receiving a multimodulated optical information signal comprising non-intensity modulation for a data signal and intensity modulation for a clock signal;

means for recovering the clock signal based on the intensity modulation of the multimodulated optical information signal;

means for converting the non-intensity modulation for the data signal to intensity modulation for the data signal; and

means for recovering the data signal from the intensity modulation for the data signal using the clock signal.

6. The method of Claim 5, wherein the non-intensity modulation comprises a phase modulation of a carrier signal.

7. The method of Claim 5, wherein the non-intensity modulation comprises a frequency modulation of a carrier signal.

8. The method of Claim 5, wherein the data signal is phase shift keyed in the multimodulated optical information signal and the clock signal is intensity shift keyed in the multimodulated optical information signal.

9. A optical receiver, comprising:

an interface for receiving a multimodulated optical  
information signal comprising non-intensity modulation  
for a data signal and intensity modulation for a clock  
5 signal;

a clock recovery element operable to recover the  
clock signal based on the intensity modulation of the  
multimodulated optical information signal;

a data recovery element operable to recover the data  
10 signal from the non-intensity modulation of the  
multimodulated optical information signal based on the  
clock signal.

10. The system of Claim 9, wherein the non-  
15 intensity modulation comprises a phase modulation of a  
carrier signal.

11. The system of Claim 9, wherein the non-  
intensity modulation comprises a frequency modulation of  
20 a carrier signal.

12. The system of Claim 9, wherein the data signal  
is phase shift keyed in the multimodulated optical  
information signal and the clock signal is intensity  
25 shift keyed in the multimodulated optical information  
signal.

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